

IN THE CLAIMS:

Please amend claims 1-4, 9-13 and 16 as follows.

1. (Currently Amended) A method, comprising:

transmitting multicast data packets in at least one first multicast tree from one transmitter through a plurality of multicast controllers to a plurality of recipients, wherein the multicast ~~connection~~communication from a multicast controller to a recipient is unidirectional;

generating at least one second multicast tree reserved for control messages in an internet protocol network beginning from a network multicast controller and ending to at ~~least one~~one or more multicast controllers at cell level; and

transmitting the control messages from the network multicast controller along the at least one second multicast tree reserved for control messages to the at least one multicast controller at cell level, the control messages comprising information on the multicast transmission of the internet protocol network and a command configured to connect to the at least one first multicast tree of the internet protocol network configured for multicasts.

2. (Currently Amended) A method as claimed in claim 1, further comprising:

connecting, when connecting to the internet protocol network, the ~~at least one~~ or more multicast controllers at cell level to the at least one multicast tree configured for the network control messages.

3. (Currently Amended) A method as claimed in claim 1, further comprising:
connecting, after receiving a control message from the network multicast controller through the at least one multicast tree configured for the control messages, the ~~at least one~~ or more multicast controllers at cell level to the at least one multicast tree configured for multicasts and defined in the control message.

4. (Currently Amended) A method as claimed in claim 1, further comprising:
transmitting, after connecting to the at least one first multicast tree configured for multicasts, by the ~~at least one~~ or more multicast controllers at cell level, packets received through the at least one first multicast tree to at least one receiver in a cell.

5. (Previously Presented) A method as claimed in claim 1, wherein the control messages further comprise information on an identifier of one or more multicast groups.

6. (Previously Presented) A method as claimed in claim 1, wherein the control messages further comprise information on a time of validity of the control messages.

7. (Previously Presented) A method as claimed in claim 1, wherein the control messages further comprise information on a sender authentication.

8. (Previously Presented) A method as claimed in claim 1, wherein the control messages further comprise a receiver filter.

9. (Currently Amended) A method as claimed in claim 1, further comprising:
registering, after receiving a control message from the network multicast controller, by the ~~at least one~~ or more multicast controllers at cell level, a recipient of a multicast defined in the control message.

10. (Currently Amended) A method as claimed in claim 1, further comprising:
notifying, after receiving a control message from the network multicast controller, by the ~~at least one~~ or more multicast controllers at cell level, recipients of its cell that a multicast is available.

11. (Currently Amended) A method as claimed in claim 1, further comprising:
notifying, after receiving a control message from the network multicast controller through the at least one multicast tree configured for control messages, by the ~~at least one~~ or more multicast controllers at cell level, recipients of its cell that a multicast must be received.

12. (Currently Amended) A method as claimed in claim 1, further comprising:

refraining, after receiving a control message from the network multicast controller through the at least one multicast tree configured for control messages, from processing the control message by the ~~at least one~~ or more multicast controllers at cell level.

13. (Currently Amended) An arrangement for implementing multicasting in internet protocol networks, the arrangement comprising:

a plurality of routers configured to transmit different components in the internet protocol networks to each other;

at least one first multicast tree configured to transmit multicast packets through a plurality of multicast controllers to a plurality of recipients, wherein the multicast ~~connection~~ communication from a multicast controller to a recipient is unidirectional;

a plurality of cell-level multicast controllers configured to transmit packets to the plurality of receivers; and

a network multicast controller that is arranged to control the cell-level multicast controllers,

wherein an internet protocol network comprises at least one second multicast tree reserved for control messages and configured to route control messages beginning from the network multicast controller and ending to the plurality of cell-level multicast controllers, the network multicast controller configured to transmit the control messages along the at least one second multicast tree to the plurality of cell-level multicast controllers, and the control messages comprise information on the multicast transmission

of the internet protocol network and a command configured to connect to the at least one first multicast tree of the internet protocol network configured for multicast transmissions.

14. (Previously Presented) An arrangement as claimed in claim 13, wherein the cell-level multicast controllers are configured to connect to the multicast tree configured for network control messages when connecting to the internet protocol network.

15. (Previously Presented) An arrangement as claimed in claim 13, wherein the cell-level multicast controllers are configured to connect to the multicast tree of the internet protocol network configured for multicasts after receiving a control message from the network multicast controller through the multicast tree configured for control messages.

16. (Currently Amended) An arrangement, comprising:

first transmission means for transmitting different components in internet protocol networks to each other;

second transmission means for transmitting multicast packets through a plurality of multicast controllers to a plurality of recipients, wherein the multicast ~~connection~~communication from a multicast controller to a recipient is unidirectional;

third transmission means for transmitting packets to the plurality of receivers; and

control means for controlling the cell-level multicast controllers,

wherein an internet protocol network comprises fourth transmission means reserved for control messages for routing control messages transmitted from the control means to the third transmission means, the control means for transmitting the control messages along the fourth transmission means to the second transmission means, and the control messages comprise information on the multicast transmission of the internet protocol network and a command configured to connect to the second transmission means of the internet protocol network configured for multicast transmissions.